## Farragut Field Trip and Lecture With Dr. Neurenschwander

The agencies were asked by several members of the CAC to develop a bullet list of basic principals that were discussed and learned at the aforementioned field trip. I did not take many notes so the list is likely incomplete and/or things that I take for granted (i.e. not noteworthy) were new ideas and important concepts to some of you. Please feel free to contact me to amend this list.

- 1. People all have a different perception of the forest. Both what is its current structure and condition, and how it will change with time. These perceptions may or may not be accurate. It behooves us as a group to develop a common and accurate perception of these things.
- 2. The trees that are most resistant to disease, insects, and frost are also most resistant to fire (e.g. ponderosa pine and larch).
- 3. The maximum shade threshold that will support ponderosa pine regeneration is 60% (i.e. there must be < 60% shade to have p. pine regenerate in a stand).
- 4. Mosaic inclusions of different ecosystem types are an essential feature of the landscape (e.g. the moist draw "islands" we have talked about leaving).
- 5. Fire intensity and fire frequency as important concepts. Open ponderosa pine stands burn often (high fire frequency) but at low intensity (minimal damage) and this shapes the structure of the ecosystem. Although fires are relatively more frequent they are easily "defended" against. Dense Douglas fir stands burn less often (lower fire frequency) but at higher intensity (considerable and often stand replacing damage). When dense Douglas fir stands burn they are difficult to stop and control (defend against).
- 6. Dry period, fuel load, ignition, and wind all contribute to fire intensity. Of these fuel load is the only one that we can effect/manage.
- 7. It may take more than a single prescribed fire to adequately remove residual fuels without creating a fire intensity that could damage the residual stand (e.g. spring burn followed by a fall burn).
- 8. Stand replacing fires are normal in some forest ecosystems but not in ponderosa pine.
- 9. Open ponderosa pine were once the most common stands in northern Idaho but are now "no more". In Latah count 89% of ponderosa pine has been lost <u>completely</u> (i.e. not 89% lost of old growth open ponderosa pine but 89% loss of all types of ponderosa pine stands).
- 10. Logging is not restoration but restoration may involve some logging.

- 11. Timing of regeneration harvest will influence insect attack risks. Harvesting from August through November will reduce the likelihood of bark beetle outbreaks because the food resource represented by the green slash has time to deteriorate during a time period that beetles are not active. Burning green slash will also achieve this end.
- 12. Invasive trees rob resources and create stress that makes old growth ponderosa pine trees more susceptible to both disease and fire. Similarly, <u>dense</u> ponderosa pine stands provide a substrate for bark beetles and trees are also weakened by intra-specific competition resulting in dual stresses to the stand.
- 13. Exclusion of fire from ponderosa pine stands exacerbates tussock moth problems by allowing Douglas fir and grand fir to come into the stand and provide food for the moths that then also place additional stress on the ponderosa pines.
- 14. To do nothing in fire dependent ecosystems such as ponderosa pine will ensure the loss of these unique resources and the social and ecological benefits of these resources.
- 15. Discussing restoration on the parade grounds it was advised that the area not be broadcast burned (risk of damage to residual stand is too high given the likely fuel loads and young age of the trees). Suggested leaving some or all slash on the ground to degrade and or piling and burning thinned trees.